Jan. 19,

Another informant tells me Sterna bergii breeds on his rocks in November.

While at Suva lately I saw Charadrius fulvus in pairs, the male in full nuptial dress.

The testes of Chrysæna luteovirens, Columba vitiensis, and Carpophaga latrans were also much developed; but I obtained eggs of the latter two months ago. I have eggs and young of Platycercus splendens and P. personatus, the latter nearly fully fledged. By the way, Professor von Suhm, of the 'Challenger,' and I, after going carefully into the subject, have come to the conclusion that the "Orange Dove" of Savinni and Lanthala (Chrysæna victor, Gould) is a phase of plumage of the "Green Dove" (C. luteovirens); the change is hardly more remarkable than the adult change of Ptilinopus perousei, also from green to yellow, though a very light one.

The Fiji Islands are very destitute of birds, very few being seen or heard in the forests; and its shores are equally void of bird-life. An exception there is in the case of the little Swift, Collocalia spodiopygia, which seems universally distributed, both inland and in the maritime regions. Charadrius fulvus goes up the river a long way, and is sometimes seen in flocks of two or three hundreds, as I saw them on the Rewa. It is very strange, however, to look on the sea, as I do from my house, and not to see the white wing of a Tern for weeks at a time; of Gulls there are none. I have seen a Puffinus (probably P. nugax) in my cruising; and Sterna fuliginosa and Anous stolidus (or A. leucocapillus) appear in large flocks; Gygis alba I saw lately on the east coast of Viti Levu (this is not included in the table of distribution); and I have detected the tail-feathers of Phaëton rubricauda in the heads of some natives. Anas superciliosa is common on the rivers, and Dendrocygna vagans in the marshes on the west coast of Viti Levu; it is called by the planters the "Mountain Duck ;" and they say it comes from the interior.

Levuka, Ovalaü, Fiji. September 6, 1874.

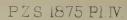
January 19, 1875.

Robert Hudson, Esq., F.R.S., V.P., in the Chair.

The Secretary called attention to a letter recently received from Ternate, in which the writer (Mr. A. A. Bruijn) stated that he possessed living examples of *Dasyptilus pesqueti*, and of four species of Paradise-birds, namely *Paradisea papuana*, *Seleucides alba*, *Diphyllodes speciosa*, and *Ptilorhis magnifica*.

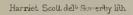
The Secretary read a letter received from Dr. Adolf Bernhard Meyer, communicating some remarks on the new Bird of Paradise lately discovered in Eastern Waigion, and described by Mr. S. C. T.





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NEW SHELLS FROM QUEENSLAND.

6

1875.] MR. BRAZIER ON NEW SHELLS FROM QUEENSLAND. 31

W. van Musschenbroek (Zool. Gart. 1875, p. 29) as Diphyllodes gulielmi III. Dr. Meyer observed :--

"Notwithstanding there are more points of resemblance between the new species and *Diphyllodes speciosa* and *D. respublica* than between it and *Cicinnurus regius*, some features immediately remind one of the latter, *e.g.* the red colour and structure of the glossy feathers of the upper parts, the webless tail-shafts, at least at the beginning, and chiefly the similar fan, formed by elongated, broad and metallic-green-edged feathers, on the sides of the breast, not quite but nearly of the same colour and size as in *Cicinnurus regius*. This fan has been hitherto known to exist only in the latter species, except as regards the homologous organization of the large *Epima*chus speciosus.

"Diphyllodes gulielmi III. has nearly the same-shaped crest, inserted on the neck, as Diphyllodes speciosa; but the crest seems to be somewhat smaller, and the colour of it differs from that of the latter species, as well as all other colours of the upper surface of the two birds, whereas the form and colour of the bill appear to be very similar in the two species. The new bird shows nothing of the broad line of iridescent feathers extending down from the chin over the breast, and nothing of the light-brown feathers of the shoulders and of the neck occurring in Diphyllodes speciosa.

"Diphyllodes gulielmi III. reminds one of D. respublica in the shape of the green velvet feathers of the breast, and especially in the shape of the two elongated tail-shafts, with the single difference that these are webbed in Diphyllodes respublica from the beginning, and that they do not project so far as in Diphyllodes gulielmi III.; but the breadth of the webs agrees. The colour of the web is between that of the button of Cicinnurus regius, which is more of a green, and that of the web of Diphyllodes speciosa, which is more of a blue.

"From this short comparison with the allied species, it follows that Diphyllodes gulielmi III. is a new species with very characteristic features, not to be confounded for a moment with any other hitherto known. These characteristic features are chiefly the shape of the elongated tail-shafts, with their web, the reddish colours of nearly all the upper parts, the violet-coloured belly, and the fan-like tufts at the sides of the breast."

The following papers were read :---

1. Descriptions of ten new Species of Shells from the Collection of Mr. Charles Coxen, of Brisbane, Queensland. By JOHN BRAZIER, C.M.Z.S.

[Received December 15, 1874.]

(Plate IV.)

1. HELIX (HADRA) MOURILYANI, sp. nov. (Plate IV. fig. 1.) Shell narrowly perforated, depressedly globose, thin, finely striated, spirally banded with chestnut bands varying in width; spire raised, whorls 6 to $6\frac{1}{2}$, moderately convex, last descending a little in front; aperture lunate, margins rather distant; peristome reflected, purplish brown; columellar margin thickened and expanded over the perforation.

Diam. maj. 18, min. 14, alt. 12 lines. Hab. Bowen, Port Denison, Queensland.

2. HELIX (HADRA) JOHNSTONEI, sp. nov. (Plate IV. fig. 2.)

Shell deeply perforated, globosely turbinated, rather thick, finely striated, banded with spiral chestnut bands, one very broad at the suture; whorls $6\frac{1}{2}$, moderately convex, last whorl large and descending in front; aperture ovately lunate, diagonal; peristome white, moderately reflected, margins approximating, columellar thickened and expanded over the perforation.

Diam. maj. 20, min. 16, alt. 14 lines.

Hab. Bowen, Port Denison, Queensland.

This species somewhat resembles *Helix incei* in its markings, but is more conical, and has a thick, white and reflected peristome.

3. HELIX (HADRA) HILLI, sp. nov. (Plate IV. fig. 3.)

Shell umbilicated, turbinately globose, thick, dark chestnut, spirally lined with darker lines; whorls $6\frac{1}{2}$, convex, the three forming the apex of a light yellow, with a dark broad band below the suture, base convex, lined as above; aperture oblique; peristome thickened and reflected, white; margins approximating, the right slightly descending, columellar thickened and partly expanded over the umbilicus.

Diam. maj. 17, min. $14\frac{1}{4}$, alt. 12 lines.

Hab. Mount Elliot, Queensland.

4. HELIX (HADRA) BELLENDEN-KERENSIS, sp. nov. (Plate IV. fig. 4.)

Shell deeply umbilicated, globosely turbinated, obliquely striated, and minutely transversely lined with small lines resembling grains, reddish brown, with two spiral chestnut bands, one on the centre and the other above; whorls 6, slightly convex, last large; base convex, striated as above; spire conical, obtuse; aperture oblique, ovately lunate, interior blue-black; peristome thickened and reflected; margins approximating, right descending a little, columellar broadly expanded and bent inwards, forming a long callous tooth.

Diam. maj. 22, min. 17, alt. 17 lines.

Hab. Bellenden-Ker Mountains, North-east Australia (Coll. Brazier).

This fine shell was only recently obtained at the locality given, which is near to the Endeavour river. The three specimens I have seen are all of the same colour.

5. HELIX (HADRA) COXENÆ, sp. nov. (Plate IV. fig. 5.)

Shell umbilicated, somewhat turbinately globose, obliquely striated,

minutely granulated, shining, thin, dirty yellow; whorls 6, convex, suture impressed, the last whorl large, obtusely carinated at the periphery, base roundly convex, with the striæ running into the deep funnel-shaped umbilicus; aperture oblique, ovately lunate, interior white; peristome white, thickened, margins approximating and joined by a thin white callus, the right thin and descending below the centre, columellar reflected slightly over the umbilicus.

Diam. maj. $14\frac{1}{2}$, min. 13, alt. 10 lines.

Hab. Johnson river, Queensland; in the scrubs (coll. Brazier).

I feel great pleasure in naming this shell after Mrs. Charles Coxen, a lady much interested in Australian natural history.

6. HELIX (HADRA) MOSSMANI, sp. nov. (Plate IV. fig. 6.)

Shell imperforate, globosely turbinated, very faintly obliquely striated, exhibiting minute spiral lines and granulations (only seen under the lens), reddish yellow, with numerous spiral chestnut lines and bands; spire conical, apex obtuse; whorls $6\frac{1}{2}$, slightly convex, suture slightly crenulated; aperture oblique, ovately lunate; peristome black, reflected, margins approximating, the right descending at the upper part, columellar thickened, with a black callus round the umbilical region.

Diam. maj. 19, min. 15, alt. $19\frac{1}{2}$ lines.

Hab. Dawson river, Queensland.

This fine species comes near to *Helix fraseri* in its markings, but differs in being more turbinated, and in the lip being thinner.

7. HELIX (RHYTIDA) SHERIDANI, sp. nov. (Plate IV. figs. 7, 7a.)

Shell umbilicated, conoidly globose, thin, closely, regularly and finely obliquely striated to the periphery, reddish chestnut; whorls $4\frac{1}{2}$, moderately convex, the last large, flattened at the suture, base convex, showing faint, irregular, oblique lines from the periphery to the edge of the umbilicus, where they become more conspicuous; umbilicus wide and deep; aperture nearly vertical, roundly lunate, bluish within; peristome acute, margins distant, columellar a little dilated.

Diam. maj. $13\frac{1}{2}$, min. 11, alt. 8 lines.

Hab. Cardwell, Rockingham Bay, N.E. Australia.

I have named this species at the request of Mr. Coxen after his friend Mr. Sheridan, of Cardwell.

8. HELIX (XANTHOMELON) DAINTREEL. (Plate IV. fig. 8.)

Shell umbilicated, somewhat depressedly globose, very thin, rugosely striated, minutely granulated, pale yellowish brown; spire conical, obtuse; whorls $5\frac{1}{2}$, convex, last large, inflated, base convex, nearly smooth; aperture oblique, lunate; peristome thickened, white, margins approximating, right descending in front, columellar reflected and partly covering the umbilicus.

Diam. maj. 12, min. $9\frac{1}{2}$, alt. $9\frac{1}{2}$ lines.

Hab. Muggerbaa, Moreton Bay, Queensland.

PROC. ZOOL. Soc.-1875, No. III.

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34 MR. BRAZIER ON NEW SHELLS FROM QUEENSLAND. [Jan. 19,

9. PUPINA COXENI, sp. nov. (Plate IV. fig. 9.)

Shell elongately ovate, rather thin, polished, shining, translucent, quite smooth, pale reddish horn-colour; spire conical, rather acute, suture distinct; whorls 6, conxex, the body-whorl the largest: aperture vertical, circular, continuous; peristome and auricles whitish, very much thickened with callus; the right canal-long and narrow, covered with a large, thickened, triangular tongue on the bodywhorl; columellar canal long and narrow, and covered with a somewhat similar tongue; peristome thickened, with a broad flattened plate below, widening towards the columella.

Length, from apex to lip $4\frac{1}{2}$ lines, from apex to broad margin below lip 5 lines; breadth $2\frac{1}{2}$ lines; diameter of aperture $1\frac{1}{4}$ line.

Hab. Mount Drvander, Port Denison, N.E. Australia.

Of this charming species I have only seen one specimen, and it remains unique, in the collection of Mr. C. Coxen. I take great pleasure in attaching his name to it.

It differs from all the other known Australian species of the genus Pupina of the polished class in having two lips, one raised perpendicularly for nearly half a line all round, the other forming a margin below.

10. CONUS COXENI, sp. nov. (Plate IV. fig. 10.)

Shell fusiform, thick, smooth, with twenty deep, spiral, punctated lines on the lower part; above, the shell becomes nearly smooth; at the angle there are three deep punctated lines which run spirally to the apex; whorls 8, flattened posteriorly, with deeply punctated lines next the suture, dotted with brown at the angle; spire elevated, apex acute ; columellar margin nearly straight, curved a little at the lower part; lip simple, thin, crenated, bluish brown within, the outer surface marked with brown flames and white and brown transverse dots.

Length 15, breadth 7 lines. Hab. Moreton Bay.

EXPLANATION OF PLATE IV.

Fig. 1. Helix (Hadra) mourilyani, p. 31.

- 2. ____ (___) johnstonei, p. 32. 3. ____ (___) hilli, p. 32. 4. ____ (___) bellenden-kerensis, p. 32.
- 5. ---- (----) coxenæ, p. 32.

6. ____ (____) mossmani, p. 33. 7, 7a. ____ (Rhytida) sheridani, p. 33.

- 8. ---- (Xanthomclon) daintreci, p. 33.
- 9. Pupina coxeni, p. 34.

10. Conus coxeni, p. 34.





A.G. Butler del. et lith Febr. 1875.

Mintern Bros. nap .

NEW SPECIES OF PROTOGONIUS

2. Descriptions of four new Species of Protogonius. By A. G. BUTLER, F.L.S., F.Z.S., &c.

[Received December 18, 1874.]

(Plate V.)

Mr. Druce having kindly allowed me to determine the forms of Protogonius * in his collection, I find them to represent the following species :---

Protogonius cecrops, Westwood. 2 examples.
— lilops, Butler. 2 examples.
— tithoreides, Butler. 2 examples.
— aquatorialis, n. sp. 1 example.
— fulvus, n. sp. 1 example.
— hippona, Fabricius. 1 example.
— diffusus, n. sp. 1 example.
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8. — semifulvus, n. sp. 1 example.

Of the last mentioned species I have seen several specimens, taken by Mr. Buckley.

1. PROTOGONIUS ÆQUATORIALIS, n. sp. (Plate V. fig. 1.)

Allied to P. lilops. Primaries black, a broad fulvous streak running from base, through the cell, across base of second median interspace, thence (bounded by second median branch) to second third of first median interspace, and thence obliquely to external angle; inner margin rather broadly black; basal half of costa tawny; a subcostal dot at end of cell, an elliptical spot on upper discoidal interspace, an elongate-lunate spot below it on the lower discoidal interspace, and five large submarginal spots in a semicircle from subcostal nervure to second median branch (the third and fourth spots smaller than the others), all ochreous; secondaries only differing from those of P. lilops in the shorter black border, terminating just above radial nervure, and the larger white spots upon it; wings below much as usual, primaries with a double subapical ochreous patch, central band of secondaries unusually angular, a well-marked submarginal whitish streak towards anal angle. Expanse of wings 3 inches 8 lines.

Curaray, Ecuador.

Coll. Druce.

Perhaps a mimic of Melinæa imitata, but I rather doubt that species ranging into Ecuador; we have it in the British Museum from Guatemala, Mexico, and Honduras only.

2. PROTOGONIUS FULVUS, n. sp. (Plate V. fig. 2.)

Allied to P. castaneus. Basal two thirds of primaries tawny; apical third black; a broad black streak running from base of costa through discocellulars to apical area, and a broad internal streak running to outer margin at external angle; a broad oblique tawny ochreous band, zigzag internally, irregularly bisinuate externally,

* See "Revision of the genus Protogonius," P. Z. S. 1873, p. 772.

running from second third of costa to near the end of second median interspace; four apical submarginal ochreous spots, the two upper ones largest, the first sagittate; sccondaries with the costal half tawny, the costa, subcostal vein, and anal half black; an apical submarginal blackish line; four submarginal tawny-tinted white spots: body brown; antennæ with the apical three-fifths yellow, base black : wings below very like *P. tithoreides*; primaries paler, two or three pale stramineous subapical spots; secondaries darker, the costal half of wing suffused with castaneous. Expanse of wings 3 inches 4 lines. Pebas. Coll. Druce.

Apparently a mimic of *Tithorea megara*.

3. PROTOGONIUS DIFFUSUS, n. sp. (Plate V. fig. 3.)

Wings above tawny; primaries with the apex from costa just beyond end of cell to third median branch dark brown, outer margin from third to first median branch narrowly bordered with brown; a rather broad band from basal costa to end of cell, uniting with an irregular oblique band from end of cell, crossing second median interspace near the base; a broad black internal streak, nearly reaching external angle; a broad subapical ochreous band, diffused and fading away into the ground-colour below second median branch; secondaries with the costa narrowly black; outer margin broadly bordered with black, tapering from inner margin to second subcostal branch; three small pale ochreous submarginal spots: body olivaceous, clothed with tawny hairs; antennæ with apical two thirds ochreous, base black; wings below much as in *P. æquatorialis*, but secondaries with the bands dark brown on costal area, and anal area plumbaginous. Expanse of wings 3 inches 6 lines.

Curaray, Ecuador.

Coll. Druce.

This species probably mimics Melinæa zaneka or Mechanitis fallax.

4. PROTOGONIUS SEMIFULVUS, n. sp. (Plate V. fig. 4.)

Primaries above bright tawny; a broad patch at apex, the costa, a streak covering costal area to end of cell and terminating in a large discocellular spot, and a broad internal streak black; secondaries black; a broad patch at apex bright tawny, the base of cell and costal area dull tawny; abdominal area brown: body brown; antennæ pale yellow, basal joint black; under surface almost as in *P. tithoreides*, but without subapical white spot.

Villagomes, Ecuador.

Coll. Druce. lecepta, Cera-

Mimics Melinæa methone and parallels Mechanitis decepta, Ceratinia semifulva, Heliconius bicoloratus, Eresia ithomiola, and Pericopus hydra, all of which are coloured in the same way and range over the same region.

EXPLANATION OF PLATE V.

Fig. 1. Protogonius aquatorialis, p. 35.

2. — fulvus, p. 35.

3. --- diffusus, p. 36.

4. ---- semifulvus, p. 36.

J. Smit, del & lith.

M&Hanhart imp

MICROCERCULUS SQUAMULATUS.

1875.] ON NEW SPECIES OF SOUTH-AMERICAN BIRDS.

3. Descriptions of some new Species of South-American Birds. By P. L. SCLATER, M.A., Ph.D., F.R.S., and OSBERT SALVIN, M.A., F.R.S.

[Received December 21, 1874.]

(Plate VI.)

1. MICROCERCULUS SQUAMULATUS, Sp. nov. (Plate VI.)

Supra fuscus unicolor : subtus fere concolor, gutture albo, pectore et ventre medio albis, plumis fusco undulatis : subalaribus et remigum marginibus internis fuscescenti-cineraceis: rostro corneo; pedibus fuscis: long tota 4.2, alæ 2.5, caudæ 0.8, rostri a rictu 1.

Hab. Venezuela, San Cristobal (Goering).

Obs. Aff. M. bamblæ, sed fascia alari alba nulla, et gutture albo necnon ventre squamulato diversus.

A single skin of this apparently new Microcerculus occurs in Goering's last collection. It was obtained at San Cristobal in the Venezuelan province of Tachira, on the frontiers of Columbia. form it seems to be nearest to M. bambla, but in plumage is perhaps rather more likely to be confounded with M. marginatus, than which, however, it has much less white below and has a longer bill.

The discovery of this bird increases the number of known species of the genus Microcerculus to six *. M. squamulatus should stand next to M. bambla.

2. AUTOMOLUS STRIATICEPS, Sp. nov.

Terreno-brunneus, pileo nigricante ; hoc cum dorso superiore flavido longitudinaliter lineato; alis immaculatis : uropygio et cauda tota rubiginoso-rufis : subtus fulvus, lateraliter obscurior, gutturis plumis fusco marginatis quasi squamatis : subalaribus et remigum marginibus internis flavicanti-fulvis : rostro corneo, pedibus fuscis: long. tota 7, alæ 3.5, caudæ rectr. med. 3.5, ext. 2.25.

Hab. Columbia iut. et Peruv.

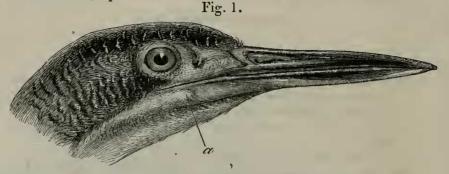
A Bogota skin of this species has been in Sclater's collection for some time, having been purchased from a London dealer. Its bill is not quite perfect; and the general similarity of its plumage to that of Anabazenops subalaris caused it to be passed over when our 'Nomenclator' was written. When M. Taczanowski brought M. Jelski's Peruvian collections to compare with Sclater's series a second, perfect example of this bird was found, which had been obtained by Jelski at Chilpes in Central Peru; and M. Taczanowski has inserted it in his list under Sclater's MS. name †.

A. striaticeps is, in fact, a very distinct species, belonging to the more strongly formed Automoli allied to A. cervinigularis, A. ochrolæmus, &c., and is distinguishable from all species known to us by

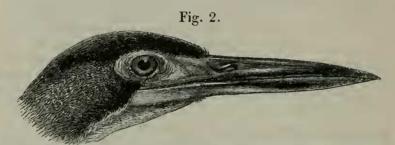
† P. Z. S. 1874, p. 528.

^{*} For a list of the other species, see Scl. et Salv. Nomencl. Av. Am. p. 6.

its clearly striated head and neck. M. Taczanowski thought that it might be the *Anabates melanorhynchus* of Tschudi (F. P. Aves, p. 241, pl. xxi. fig. 1); but we believe that that name is a mere synonym of *A. subulatus*, Spix.



Head of *Tigrisoma fasciatum*, half natural size. *a.* Feather-patch on base of lower mandible.



Head of Tigrisoma salmoni (half natural size), showing bare space on lower mandible.

3. TIGRISOMA SALMONI, sp. n.

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- Mas ad. Supra viridescenti-æneo-nigricans, pallido cervino (nisi in pileo) crebre transfusciatum : alis caudaque schistaceo-nigris, illis et alula spuria albo terminatis; campterio et margine alari albis: mandibula, sicut in T. brasiliensi nuda; gula media alba, plumosa, lateraliter nuda albo circumcincta: cervice media alba rufescente intermixto: abdomine rufescente: hypochondriis fusco-nigris; subalaribus albo nigroque variolatis: rostro fusco-nigro, mandibula margine inferiore flavido: long. tot. 26 poll., alæ 10.50, caudæ 4, rostri a rictu 4.5.
- Avis hornot. Supra nigra ciunamomeo punctata, dorsi maculis minoribus: uropygio fusco-nigro albo transfasciato: alis et cauda schistaceo-nigris, hac fasciis tribus angustis notata, illis albo terminatis; secundariis albo transfasciatis: gulæ parte vestita alba: pectore et abdomine albis, maculis fuscis cervino marginatis punctatis; hypochondriis albo nigroque transfasciatis: campterio et margine alari albis: long. tarsi 3.5, dig. med. cum ungue 3.1.

Hab. Columbia ad ripas fluv. Cauca (T. K. Salmon).